2. The total mortality of cattle in the State during the half-year shows an increase of 9.9 per cent compared to the corresponding period of the previous year, while mortality under contagious diseases alone shows an increase of 4.5 per cent. Mortality under Rinderpest was the lowest ever recorded being 7.6 per cent of the total mortality under contagious diseases. Mortality under foot, and mouth also is the lowest observed for some years. The mortality under Hæmorrhagic Septicæmia, Anthrax and Blackquarter formed 56.7 per cent of the total mortality under contagious diseases during the period under review.

Cattle Mortality Réturns. The Revenue Commissioner's attention is invited to the remarks of the Superintendent, Civil Veterinary Department, in the matter of the collection of the returns, and he is requested to take suitable action to enforce the preparation and submission of correct returns in future.

S! ABDUL WAJID,
Secretary to Government,
Development Department.

ANNEXURE.

LETTER No. C. S. 301-627 OF 1932-33, DATED THE 1818 APRIL 1933, FROM THE SUPERINTENDENT, CIVIL VETERINARY DEPARTMENT, BANGA-LORE, TO THE DIRECTOR OF AGRICULTURE IN MYSORE, BANGALORE.

I have the honor to forward herewith the return of Cattle Mortality in the State, for the half-year ending 31st December 1932, together with the statement of C. M. returns received from Patels for the same period and to state:

- 1. The total mortality in the State during the half-year from all causes—both contagious and non-contagious—shows an increase of 3,331 or 9'9 per cent over that of same period during the previous year.
- 2.16 That the mortality due to contagious diseases alone shows an increase of 342, or 4.5 per cent over that of the same period for the previous year.
- 3. Mortality under Rinderpest, the most serious disease of Live-stock in the State, is the lowest ever recorded, being only 606 or 7.6 per cent of the total mortality under contagious diseases.

During the period under review, the incidence of Rinderpest was very low mainly owing to prompt control measures being adopted to stamp out the few infected centres before the commencement of Cattle Fairs when a large scale movement of cattle takes place usually leading to rapid spread of the disease.

During the half-year, excepting in two instances in Shimoga District, action under Regulation II of 1927, was not found necessary as raiyats readily submitted their cattle for inoculation.

Seven thousand, five hundred and twenty-five S. S. inoculations were performed during the period under review.

4. Although the total mortality under Blackquarter, Anthrax and Hæmorrhagic Septicæmia shows a decrease of 3'9 per cent over to that of the previous year, they still formed 56'7 per cent of the total mortality under contagious diseases during the half-year. Mortality under Blackquarter and Anthrax is specially noticeable.

Blackquarter filtrate, bacterin and serum as well as H. S. serum and vaccine prepared by the Mysore Serum Institute have been exclusively used when dealing with outbreaks of these diseases.

Sixty-three thousand, eight hundred and fifty-eight inoculations were performed during the half-year ending December 1932 in all.

- 5. Mortality under Foot and Mouth is the lowest observed for some years.
- 6. The mortality under Parasitic Diseases is shown as 810 only, but this appears to represent deaths from parasitic infestation only among cattle, as during personal investigation by the officers of the Department, it was observed that a very large mortality had occurred among sheep and goats due to worm parasites. It is evident, therefore, that

mortality among sheep and goats does not receive the same degree of attention from Patels as that of cattle. It will be necessary in the interests of Live-stock improvement, to emphasise the need for reporting and recording mortality among these animals also by Patels in future.

7. The receipt of C. M. returns from Patels in Taluk Offices appears to have slightly improved, but still remains unsatisfactory in many of the taluks, in spite of Government Orders and Revenue Commissioner's Circulars.

During the period under review, the percentage of C. M. returns received in the Taluk. Offices of Bangalore, Hassan, Arkalgud and Saklespur, is unsatisfactory and no endeavour seems to have been made to collect even 50 per cent of the returns.

REVIEW OF THE CATTLE MORTALITY RETURNS FOR THE HALF-YEAR ENDING 31st DECEMBER 1932.

The total reported mortality among Live-stock in the State during the half-year ending 31st December 1932 was 36,846 as compared with 33,515 for the last half of the previous year. The increase of 3,331 or 9.9 per cent is almost entirely accounted for by an increase in reported deaths from non-contagious causes, the increase under this head being 2,979. The increase under contagious diseases over the figures of the last half of 1931 was 342 or about 4.5 per cent.

As pointed out by the Superintendent, the deaths under Rinderpest (606) are the lowest on record for any similar period. This disease which is looked upon throughout India as the most serious disease of Agricultural Live-stock, has for the time being, at least ceased to be of any significant importance in Mysore. While this may be due partly to a natural fall following the very severe outbreaks of 1927, 1928 and 1929, a common phenomenon in the case of contagious diseases, I think there can be no doubt that it is largely due to the very efficient inoculation campaign of the serum simultaneous method which has now continued for a period of five years.

The four diseases which were responsible for the increase under deaths from contagious causes are Anthrax, Blackquarter, Foot and Mouth and Parasitic Diarrhea. To these must be added an increase under other deaths from "Other contagious diseases." As regards the three diseases mentioned above, the first two, Anthrax and Blackquarter, are much the most serious and luckily we have now sera and vaccines for their control. Foot and Mouth is a much less serious cause of mortality and there is as yet no satisfactory method for its control. The same remarks apply to Parasitic Diarrhea.

As regards other contagious diseases, these represent diseases the cause of which is obscure. Most of the deaths under this head occur among sheep and are apparently the result of attack by parasitic worms. Sheep diseases have as yet been very imperfectly investigated in India and there is a very large field for work in this State along this line. With the one officer employed on disease investigation, progress must of necessity be slow.

As will be noted, deaths from contagious diseases were less than a third of those from natural causes, a condition which I think must be considered as very satisfactory. It is also satisfactory to note that practically no coercive measures have had to be taken in connection with inoculation work.

L. C. COLEMAN, Director of Agriculture...

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CHITALDRUG	Cattle	22	8	103	867	-	:	1	9	, 63	616	42	191	-FI	1,607	643	2,266	2,872		:	E	:-
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Statement showing the receipt of Cattle Mortality Returns in the Mysore State for the half-year ending 31st December 1932.

District	Taluk		No. of charak villages			of retu	THE PEC	_		Average percentage during the half-year onding 31st Dec.	Average percentage during the half-year ending with 30th June
				July 1932	Ang. 1932	Sept. 1982	Oct. 1982	Nov. 1932	Dec. 1932	1932.	1932.
Bangalore .	Bangalore Anekal Hoskote Nelamangala Dodhallapur Devanhalli Kankanhalli Magadi Channapatna Closepet	### ##################################	381 181 814 286 272 242 281 803 142 185	42 88 57 66 82 61 87 60 89	49 87 23 51 77 63 64 68 84	54 91 48 64 76 62 88 59 97	55 92 60 70 76 61 73 67 82 70	49 90 63 71 75 63 50 58 86 74	59 67 63 68 64 76 65 88	50 89 48 61 75 62 76 60 86	48 89 86 68 79 59 88 69 88
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Mysere	Heggaddevankote Mandya Maddur Malyalli T. Narsipur Soringspatam Nagamangala Krishnarajpete Chamrajnagar Nanjangud Yelandur Gundlupet Yedatore Hunsur Periyapatua	905 905 105 105 100 100 100 100 100 100 100 1	131 167 171 153 176 124 180 940 940 945 170 94 126 150 170 186	76 58 59 63 65 59 70 74 88 51 100 63 65 76	70 67 69 74 65 66 69 71 83 54 91 68 76 64	74 74 72 61 76 66 56 80 80 80 87 74 66 79	79 78 81 60 78 68 62 75 78 78 100 66 69 79 66	68 82 60 65 68 66 67 68 61 68 100 81 65 76 61	64 79 67 70 79 71 70 70 81 63 100 81 66 77	72 74 67 65 74 68 79 77 80 68 97 72 67 77	79 69 53 68 53 68 67 72 71 60 57 77 65 57
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Tumkur	Tumkur Madhugiri Sira Gubbi Kunigal Pavagada Tiptur Chiknayakanhalli Thuruvekore Sub-Ta Kortagere	luk :	810 271 220 - 861 288 185 227 -209 149 203	61 74 71 82 77 90 88 84 75	61 69 60 80 70 90 75 82 74 56	61 79 64 79 78 87 -78 86 79 61	52 83 61 78 76 91 82 83 76	77 70 81 76 88 80 77 71 64	79 71 82 75 87 79 88 69 61	60 77 68 80 75 89 80 88 80	62 77 66 79 = 68 - 84 79 94
Chitaldrug	Chitaldrog Jagolur Hiriyur Dayangore Harihar Sub-Taluk Hosdurga Challakere Holalkere Molakalmuru	1 	165 184 182 176 76 188 151 157	58 77 80 67 93 68 74 48 80	50 60 61 69 96 59 68 78	50 78 96 75 96 69 72 70	59 84 88 77 81 56 76 70	72 82 96 74 100 63 69 72 78	58 82 100 68 97 54 60 73 94	57 80 87 72 91 57 70 68 81	61 83 75 63 92 69 70 67
Shimoga	Shimoga Tirthaballi Sorab Sagar Hosanagar Channagiri Honnali Shikarpur Kumsi	79 100 100 100 100 100 100 100 100 100 10	228 246 261 261 206 192 146 184	67 79 92 70 87 76 -74 88 90	61 86 85 60 84 75 54 90	46 87 87 67 81 77 75 84	64 91 82 78 84 82 80 81 84	60 81 70 83 75 76 89	42 86 89 81 84 81 73 98	55 84 84 74 84 77 72 85 89	58 79 85 70 84 72 73 60 68
Kadur	Kadur Obikmagalur Mudgere Tarikoro Koppa Narasimharajapura Sringeri	### ### ### ### ### ###	237 219 138 189 105 65 25	68 68 91 79 84 92 100	63 72 94 74 84 93	63 78 96 79 87 90 100	60 - 87 - 88 78 91 93 100	64 84 93 78 98 98	63 86 68 76 95 89 100	62	69 69 86 74 88 94